

Patent Claims

1. A method for monitoring a program,
 - a) in which the program has an instrumentation
5 part added to it;
 - b) in which the instrumentation part generates a message and transmits it to a monitoring process; and
 - c) in which the monitoring process initiates an
10 action.
2. The method as claimed in claim 1,
in which the action comprises one of the following options:
 - 15 d) display of the message;
 - e) intervention in the running of the program; or
 - f) open and/or closed-loop control of a unit associated with the program.
- 20 3. The method as claimed in claim 1 or 2,
in which, after transmitting the message, the instrumentation part waits for a response, which is produced by the monitoring process.
- 25 4. The method as claimed in claim 3,
in which the response is produced after an input by a user or by an automated sequence.
5. The method as claimed in one of the preceding
30 claims,
in which a number of messages are presented as a list, a tree chart or as a message sequence chart (MSC).
- 35 6. The method as claimed in one of the preceding claims,
in which the program is a part of a larger program.

7. The method as claimed in one of the preceding claims,
in which a function which is associated with the program is instrumented.
- 5 8. The method as claimed in one of the preceding claims, in which middleware which is associated with the program is instrumented.
- 10 9. The method as claimed in one of the preceding claims,
in which at least one of the following mechanisms is monitored:
g) remote procedure call (RPC),
15 h) message transmission,
i) control sequence.
10. The method as claimed in one of the preceding claims,
20 in which a number of programs are monitored in a distributed system, or one program which is distributed throughout the system is monitored.
11. The method as claimed in claim 10,
25 in which semantic correctness is checked by means of predetermined heuristics.
12. The method as claimed in one of the preceding claims,
30 for testing, controlling or maintaining a technical system.
13. An arrangement for monitoring a program,
in which a processor unit is provided, which is set up in such a manner that
35 j) the program can have an instrumentation part added to it;

- k) the instrumentation part generates a message and transmits it to a monitoring process; and
- l) the monitoring process initiates an action